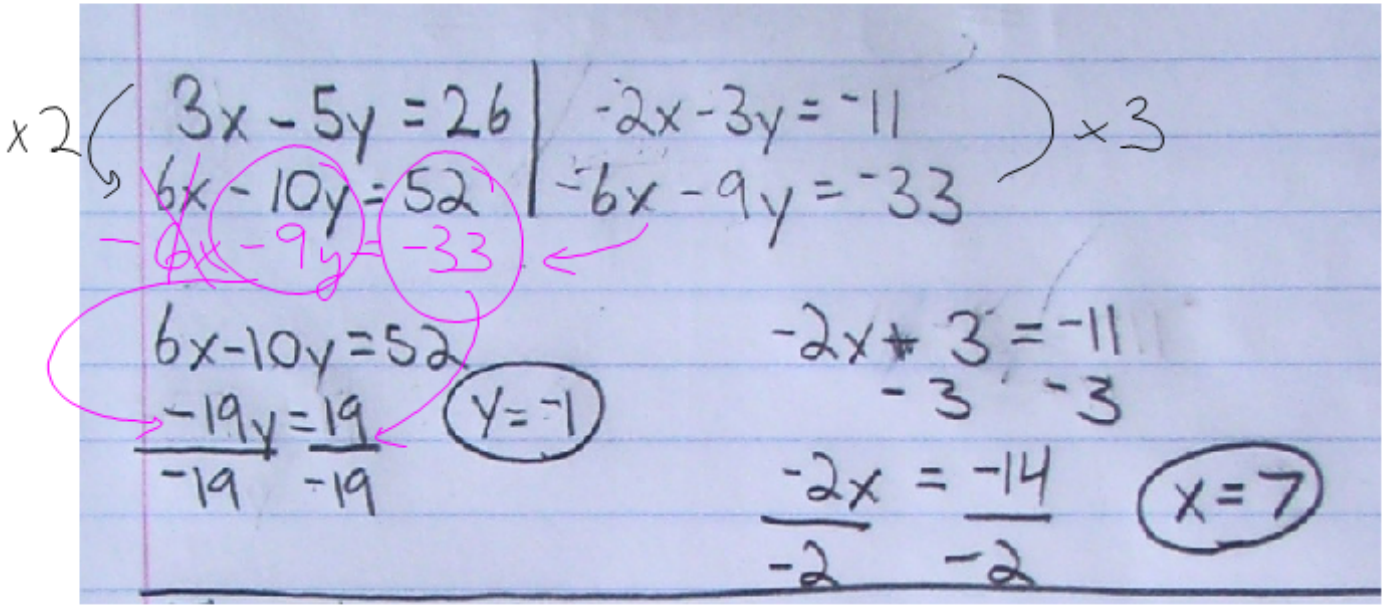
For each system, choose the method of solving that seems easier to use (substitution or elimination). Explain why you made each choice, then, solve the system:

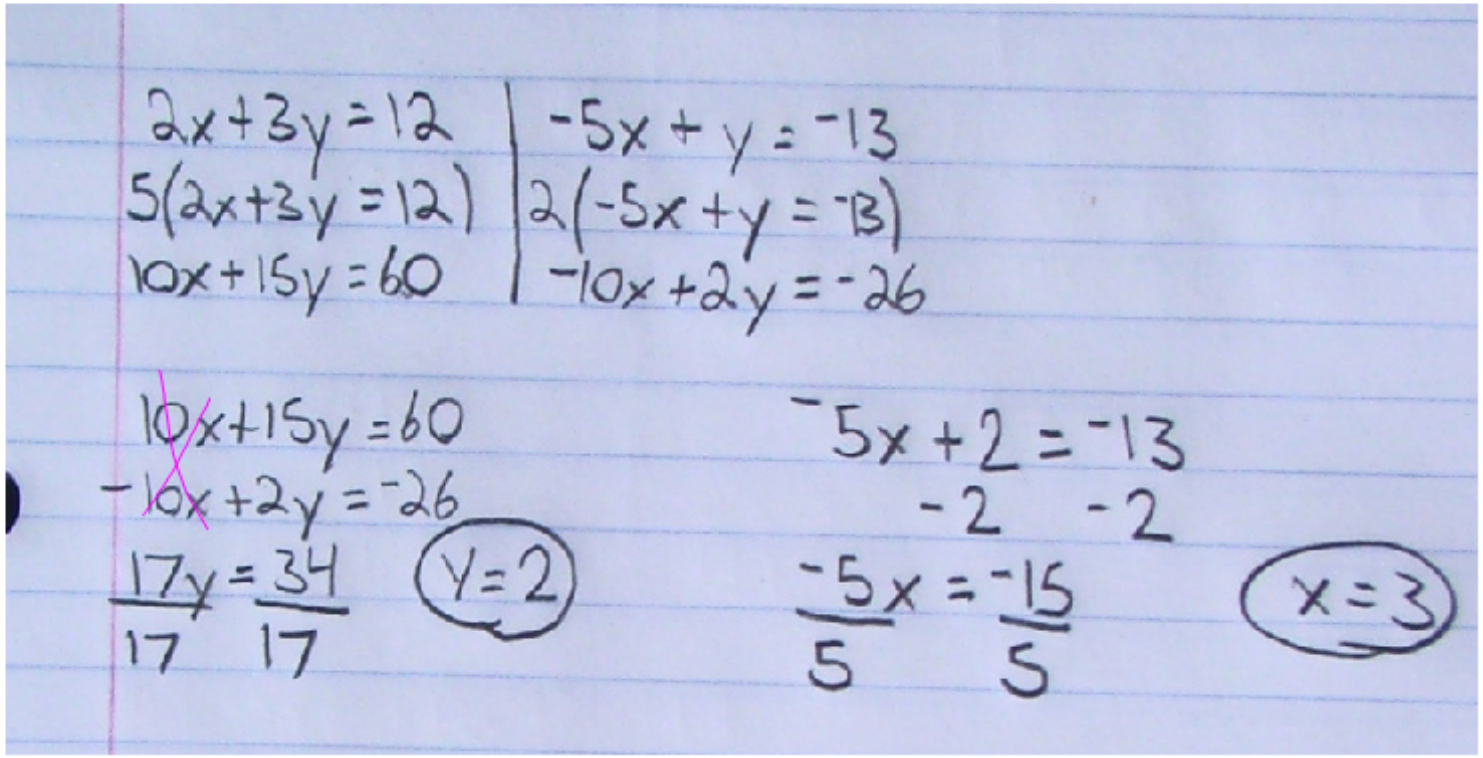
$$\begin{aligned} 3x - 5y &= 26 \\ -2x - 3y &= -11 \end{aligned}$$

$$\begin{aligned} 2x + 3y &= 12 \\ -5x + y &= -13 \end{aligned}$$

$$\begin{aligned} -3x - 5y &= 7 \\ 6x - 10y &= -14 \end{aligned}$$

$$\begin{aligned} -4x + 2y &= 10 \\ y &= 2x + 3 \end{aligned}$$


x2
3x - 5y = 26
6x - 10y = 52
- 6x - 9y = -33
6x - 10y = 52
-19y = 19
-19 -19
y = -1
x3
-2x - 3y = -11
-6x - 9y = -33
-2x + 3 = -11
-3 -3
-2x = -14
-2 -2
x = 7


2x+3y=12
5(2x+3y=12)
10x+15y=60
-5x+y=-13
2(-5x+y=-13)
-10x+2y=-26
10x+15y=60
-10x+2y=-26
17y=34
17 17
Y=2
-5x+2=-13
-2 -2
-5x=-15
5 5
x=3

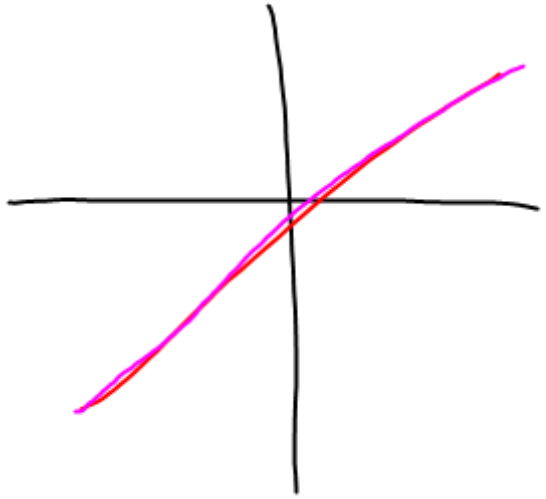
$$-3x+5y=7$$

$$6x-10y=-14$$

$\times 2$

$$-6x+10y=14$$

$$0=0$$



$-4x + 2y = 10$

$y = 2x + 3$

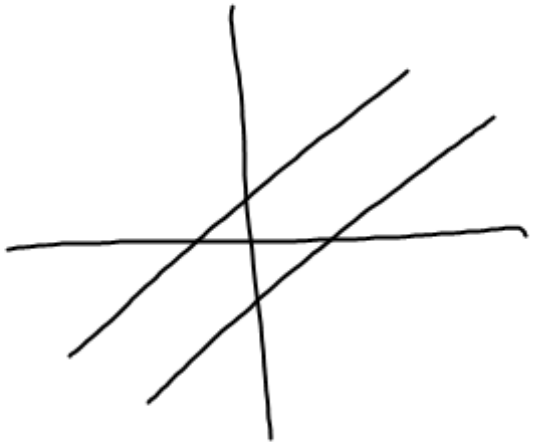
No solution?

$\frac{2y}{2} = \frac{4x + 10}{2}$

$y = 2x + 5$

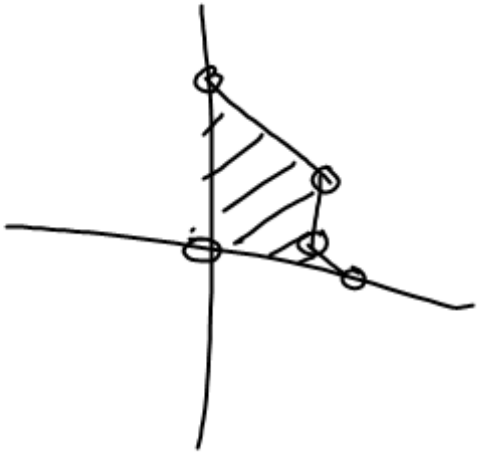
$-4x + 2(2x + 3) = 10$

$-4x + 4x + 6 = 10$



Inconsistent = No Solution
(parallel lines)

Dependent => $0 = 0$, $2 = 2$, etc.
Same line



Cookies Assessment (due ~~Tuesday~~ Wednesday):

1) Answer the Woo's dilemma, i.e., how many of each kind of cookie gives them the most profit? Include how much of each constraint is used.

2) Provide a convincing explanation that your answer provides the greatest profit (HINT: Graphs & Algebra are convincing arguments).

3) Add charts, graphs, equations, constraints, diagrams, etc. to your writeup.

HW: Complete review worksheet and Cookies Writeup.

STUDY! Bring questions to class on Wed.